

UNITED STATES PATENT AND TRADEMARK OFFICE

ENITED STATES DEPARTMENT OF COMMERCE Enited States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,393	07/17/2003	Li-Hsien Yen	10026-US-PA	1392
31561	7590 08/11/2004	EXAMINER		INER
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE			LAM, CATHY FONG FONG	
7 FLOOR-1, NO. 100 ROOSEVELT ROAD, SECTION 2		ART UNIT	PAPER NUMBER	
TAIPEI, 100			1775	
TAIWAN			DATE MAILED: 08/11/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

		<u> </u>				
	Application No.	Applicant(s)				
Office Action Community	10/604,393	YEH ET AL.				
Office Action Summary	Examiner	Art Unit				
	Cathy Lam	1775				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the o	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period v - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tir y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	mely filed /s will be considered timely. In the mailing date of this communication. ID (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 27 M	lav 2004					
3) Since this application is in condition for allower	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) ☐ Claim(s) 1-8 and 10 is/are pending in the application 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-7 and 10 is/are rejected. 7) ☐ Claim(s) 8 is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ acce	0)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the		• •				
Replacement drawing sheet(s) including the correcting 11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list of	s have been received. s have been received in Applicati ity documents have been receive ı (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)						
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

Art Unit: 1775

In view of the response filed on May 27th 2004, only claims 1-8 and 10 exist in the application.

Specification

- 1. The disclosure is objected to because of the following informalities: on page 2 line 12 the word "lone"; on page 4 paragraph [0011] "isa"; on page 5 line 4 "filmsby" & line 11 "usinga"; page 6 line 4 "filmswill"; and on page 14 line 9 "filmswill" are typographical errors. Appropriate correction is required.
- 2. Furthermore, there is no mention or explanation in the specification of numerals **312** and **411** in Figures 3 and 4, respectively.

Claim Rejections - 35 USC § 112

3. Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is vague and indefinite as to what "a far infrared ceramic" is referring to?

Claim Rejections - 35 USC § 102/103

4. Claims 1, 2, 4, 6-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kambe et al (US 5938979).

Kambe discloses an electromagnetic shielding material comprised of a polymer binder (504) and magnetic particles (502) (Fig. 5).

The magnetic particles are nanoscale particles that are imbedded in the polymer binder (col 10 L 51-54 & L 65-66). The magnetic particles are carbon containing

Art Unit: 1775

compound (col 10 L 29-33). Carbon fibers, carbon black or graphite may also be imbedded in the polymer binder (col 11 L 31-37).

The electromagnetic shielding material is formed into a layer over which a second layer (558) which can be a metal layer is formed (col 11 L 50-52 & Fig. 6).

Kambe teaches the present invention but only in a single layer of EM shielding layer and a single layer of metal layer (Fig. 6). However, making Kambe's invention from a single layer to a multilayer would be an obvious modification.

5. Claims 1, 2, 4-6 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Allen et al (US 6410847).

Allen discloses an EM wave absorbing material comprised of a molded body (18) and a cover (16). The cover (16) is plated over the entire exterior surface of the molded body (18) (Fig. 2e, col 3 L 32-37).

The molded body is a composite material comprised of a plastic material and an EM wave absorbing material (col 4 L 32-34). The EM wave absorbing material is fillers such as metal coated graphite, carbon fibers, etc. (col 4 L 42-48).

The cover (16) is comprised of a copper layer and a nickel layer (col 5 L 7-12).

The prior art only teaches a single layer of EM wave shielding plastic material.

The examiner takes the position that making the structure a multilayer arrangement is an obvious variation.

6. Claims 1-2, 4-6 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Gabower (US 6570085).

Art Unit: 1775

Gabower teaches an EM shielding material comprised of a thermoformable polymeric sheet (25) and thin metal layers (27,29) (Fig. 2).

The thermoformable polymeric sheet (25) is comprised of a polymeric material and fillers. The fillers are carbon black or graphite (col 3 L 40-53). Two thin metal films (27,29) are coated onto the surfaces of the polymeric sheet (col 3 L 40-42). The metal films are aluminum or copper films (col 5 L 11-16).

The prior art only teaches a single layer of EM shielding sheet, however additional layers of such sheet would be an obvious variation.

Claim Rejections - 35 USC § 103

7. Claims 1-7 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kambe et al (US 5938979) or Allen et al (US 6410847) or Gabower (US 6570085).

Art Unit: 1775

All of the prior art teach an EM wave shielding material comprised of a carbon or carbon compound filled polymeric resin material and metallic film(s) formed thereover.

The prior art however does not teach the shielding is in a multilayer structure, nor do they mention the thickness of the metallic film(s).

In view of the prior art teachings, one skill in the art would fabricate a multilayer EM shielding structure because add on layers would increase the EM wave shielding effect.

Furthermore, one skill in the art would choose the appropriate metallic film thickness because it would be a matter of design choice.

Allowable Subject Matter

8. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if incorporate into the independent claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cathy Lam whose telephone number is (571) 272-1538. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1775

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cathy Lam

Primary Examiner Art Unit 1775

cfl August 5, 2004